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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 223

[Docket No. 120328230-1019-01]

RIN 0648-BC10

Sea Turtle Conservation; Shrimp Trawling Requirements

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; request for comments; notice of public hearings.

SUMMARY: We are proposing to withdraw the alternative tow time restriction and require all skimmer trawls, pusher-head trawls, and wing nets (butterfly trawls) rigged for fishing to use turtle excluder devices (TEDs) in their nets. The intent of this proposed rule is to reduce incidental bycatch and mortality of sea turtles in the southeastern U.S. shrimp fisheries, and to aid in the protection and recovery of listed sea turtle populations.

DATES: Written comments (see ADDRESSES) will be accepted through [insert date 60 days after date of publication in the FEDERAL REGISTER]. Public hearings on the proposed rule will be held in May and June 2012. See SUPPLEMENTARY INFORMATION for meeting dates, times, and locations.

ADDRESSES: You may submit comments on this proposed rule, identified by 0648-BC10, by any of the following methods:

- Electronic Submissions: Submit all electronic public comments via the Federal e-Rulemaking Portal: <http://www.regulations.gov>.
- Mail: Michael Barnette, Southeast Regional Office, NMFS, 263 13th Avenue South, St. Petersburg, FL 33701.
- Fax: 727-824-5309; Attention: Michael Barnette.

Instructions: All comments received are a part of the public record and will generally be posted to <http://www.regulations.gov> without change. All Personal Identifying Information (for example, name, address, etc.) voluntarily submitted by the commenter may be publicly accessible. Do not submit Confidential Business Information or otherwise sensitive or protected information. We will accept anonymous comments (enter N/A in the required fields, if you wish to remain anonymous). You may submit attachments to electronic comments in Microsoft Word, Excel, WordPerfect, or Adobe PDF file formats only.

FOR FURTHER INFORMATION CONTACT: Michael Barnette, 727-551-5794.

SUPPLEMENTARY INFORMATION:

Background

All sea turtles in U.S. waters are listed as either endangered or threatened under the Endangered Species Act of 1973 (ESA). The Kemp's ridley (*Lepidochelys kempii*), leatherback (*Dermochelys coriacea*), and hawksbill (*Eretmochelys imbricata*) turtles are listed as endangered. The loggerhead (*Caretta caretta*; Northwest Atlantic distinct population segment) and green (*Chelonia mydas*) turtles are listed as threatened, except for breeding populations of green turtles in Florida and on the Pacific coast of Mexico, which are listed as endangered.

Sea turtles are incidentally taken, and some are killed, as a result of numerous activities, including fishery-related trawling activities in the Gulf of Mexico and along the Atlantic seaboard. Under the ESA and its implementing regulations, taking (harassing, injuring or killing) sea turtles is prohibited, except as identified in 50 CFR 223.206, according to the terms and conditions of a biological opinion issued under section 7 of the ESA, or according to an incidental take permit issued under section 10 of the ESA. Incidentally taking threatened sea turtles during shrimp trawling is exempted from the taking prohibition of section 9 of the ESA if the conservation measures specified

in the sea turtle conservation regulations (50 CFR 223.206) are followed. The same conservation measures also apply to endangered sea turtles (50 CFR 224.104).

The regulations require most shrimp trawlers operating in the southeastern United States to have a NMFS-approved TED installed in each net that is rigged for fishing, to allow sea turtles to escape. TEDs currently approved by NMFS include single-grid hard TEDs and hooped hard TEDs conforming to a generic description and one type of soft TED – the Parker soft TED (see 50 CFR 223.207). However, skimmer trawls, pusher-head trawls, and vessels using wing nets currently may employ alternative tow time restrictions in lieu of TEDs, under 50 CFR 223.206(d)(2)(ii)(A). The alternative tow time restrictions currently limit tow times to 55 minutes from April 1 through October 31, and 75 minutes from November 1 through March 31.

TEDs incorporate an escape opening, usually covered by a webbing flap, which allows sea turtles to escape from trawl nets. To be approved by NMFS, a TED design must be shown to be 97 percent effective in excluding sea turtles during testing based upon specific testing protocols (50 CFR 223.207(e)(1)). Most approved hard TEDs are described in the regulations (50 CFR 223.207(a)) according to generic criteria based upon certain parameters of TED design, configuration, and installation, including height and width dimensions of the TED opening through which the turtles escape.

Over the past two years we have documented elevated sea turtle strandings in the northern Gulf of Mexico, particularly throughout the Mississippi Sound area. In the first three weeks of June 2010, over 120 sea turtle strandings were reported from Mississippi and Alabama waters, none of which exhibited any signs of external oiling to indicate effects associated with the Deepwater Horizon (DWH) oil spill event. A total of 644 sea turtle strandings were reported in 2010 from Louisiana, Mississippi, and Alabama waters, 561 (87 percent) of which were Kemp's ridley sea turtles. During March through May of 2011, 267 sea turtle strandings were reported from Mississippi and Alabama waters alone. A total of 525 sea turtle strandings were reported in 2011 from Louisiana,

Mississippi, and Alabama waters, with the majority (455) occurring from March through July, 390 (86 percent) of which were Kemp's ridley sea turtles. These stranding numbers are significantly greater than reported in past years; Louisiana, Mississippi, and Alabama reported 42 and 73 total sea turtle strandings for 2008 and 2009, respectively. Strandings typically represent only a small fraction of actual mortality; therefore, these stranding events represent significant amounts of sea turtle mortality. However, it should be noted that stranding coverage has increased considerably due to the DWH oil spill event, which has increased the likelihood of observing stranded animals.

Necropsy results indicate a significant number of stranded turtles from both the 2010 and 2011 events likely perished due to forced submergence (drowning), which is commonly associated with fishery interactions. Additionally, information from NMFS and Mississippi Department of Marine Resources (MDMR) enforcement, stemming from the monitoring of Mississippi Sound skimmer trawl vessels in 2010, indicate the vessels in the skimmer trawl fleet exceed alternative tow time requirements.

Because of the elevated strandings in 2010 and 2011, as well as issues identified within the shrimp fisheries that indicated an evaluation of alternative tow time restrictions within the skimmer trawl sector was warranted, NMFS began developing a draft environmental impact statement (DEIS); a notice of availability is expected to publish in the Federal Register on May 18, 2012. The analysis included in the DEIS demonstrates that withdrawing the alternative tow time restriction and requiring all skimmer trawls, pusher-head trawls, and wing nets rigged for fishing to use TEDs in their nets would reduce incidental bycatch and mortality of sea turtles in the southeastern U.S. shrimp fisheries and, therefore, may be a necessary and advisable action to conserve threatened sea turtle species.

While the recent stranding events acted as a catalyst for examining sea turtle bycatch issues within the shrimp fisheries and, ultimately, this proposed rule, NMFS has previously considered a TED requirement for skimmer trawls, pusher-head trawls, and

wing nets (butterfly trawls). For example, on May 8, 2009, NMFS published a notice of intent (NOI) to prepare an environmental impact statement and conduct public scoping meetings, and made available a scoping document presenting various approaches to regulating trawl fisheries in the Atlantic Ocean (74 FR 21627). The scoping document suggested using a phased approach to implement regulations to reduce sea turtle captures by requiring capture mitigation strategies (i.e., TEDs) as technology becomes available. “Phase I” would have further regulated the summer flounder and Atlantic sea scallop fisheries, as well as introduce regulations for the whelk, croaker/weakfish, and calico scallop trawl fisheries. Regulation of fisheries in “Phase II,” which included sheepshead, black drum, king whiting, porgy, southeastern U.S. shrimp (skimmer trawl and trynets), Spanish sardine, scad, ladyfish, squid, mackerel, butterfish, and Northeast multispecies (large- and small-mesh) trawl fisheries, would be evaluated for subsequent rulemaking. Finally, “Phase III” regulations would have been developed for the skate, horseshoe crab, monkfish, bluefish, spiny dogfish, and herring trawl fisheries, and any other trawl fisheries not previously identified or considered. The NOI and scoping document acknowledged, however, that the implementation sequence could shift we obtain testing results and new information about additional trawl fisheries.

Additionally, in June 2010, NMFS prepared but never published an emergency rule in accordance with Section 4(b)(7) of the ESA (16 U.S.C. 1533(b)(7)) to require TEDs for all skimmer trawls, pusher-head trawls, and wing nets (butterfly trawls) rigged for fishing in Mississippi and Alabama state waters. Before the emergency rule could be implemented, however, oil from the DWH oil spill event reached nearshore areas of the Northern Gulf of Mexico, and the states closed their waters to all fishing.

Skimmer Trawls, Pusher-Head Trawls, and Wing Nets

Developed in the early 1980s, the skimmer trawl was intended for use in some areas primarily to catch white shrimp, which have the ability to jump over the headrope of standard trawls while being towed in shallow water. The skimmer net frame allows

the net to be elevated above the water while the net is fishing, thus preventing shrimp from escaping over the top. Owing to increased shrimp catch rates, less debris and/or fish and other bycatch, and lower fuel consumption than otter trawlers, the use of skimmer nets quickly spread throughout Louisiana, Mississippi, and Alabama. The basic components of a skimmer trawl include a frame, the net, heavy weights, skids or “shoes,” and tickler chains. The net frame is usually constructed of steel or aluminum pipe or tubing and is either L-shaped (with an additional stiff leg) or a trapezoid design. When net frames are deployed, they are aligned perpendicularly to the vessel and cocked or tilted forward and slightly upward. This position allows the net to fish better and reduces the chance of the leading edge of the skid digging into the bottom and subsequently damaging the gear. The frames are maintained in this position by two or more stays or cables to the bow. The outer leg of the frame is held in position with a “stiff leg” to the horizontal pipe and determines the maximum depth at which each net is capable of working. The skid, or “shoe,” is attached to the bottom of the outer leg, which allows the frame to ride along the bottom, rising and falling with the bottom contour. The bottom of the gear includes tickler chains and lead lines. The skimmer trawl is the most popular trawl type after the otter trawl, and is widely utilized in Louisiana waters.

Vietnamese fishermen who moved into Louisiana in the early 1980s introduced the pusher-head trawl, also known as the “xipe” or chopstick net. The pusher-head trawl net is attached to a rigid or flexible frame similar to the wing net; however, the frame mounted on the bow of the boat is attached to a pair of skids and fished by pushing the net along the bottom.

Wing nets (butterfly trawls or “paupiers”) were introduced in the 1950s and used on stationary platforms and on shrimp boats either under power or while anchored. A wing net consists of square metal frame which forms the mouth of the net. Webbing is attached to the frame and tapers back to a cod end. The net can be fished from a stationary platform or a pair of nets can be attached to either side of a vessel. The vessel

is then anchored in tidal current or the nets are “pushed” through the water by the vessel. The contents of the wing net, as well as the contents of skimmer and pusher-head trawls, can be picked up and dumped without raising the entire net out of the water, which is necessary with an otter trawl. While wing nets, as well as pusher-head trawls, are allowable gear types in the Northern Gulf of Mexico, they are not as common as skimmer trawls. For example, while the MDMR does not differentiate gear type within their shrimp fishery, a 2008 survey of trip tickets indicated there were approximately 247 otter trawl, 56 skimmer trawl, 4 butterfly net, and 2 pusher-head trawls active in Mississippi.

Sea Turtle Bycatch in Skimmer Trawls, Pusher-Head Trawls, and Wing Nets

While there is available information documenting sea turtle captures in the skimmer trawl fisheries (e.g., Price and Gearheart 2011), skimmer trawls, pusher-head trawls, and wing nets were initially allowed to use alternative tow time restrictions in lieu of TEDs under the assumption that the trawl bags were typically retrieved at intervals that would not be fatal to most sea turtles that were captured in the net. The December 2, 2002 biological opinion (NMFS 2002) noted that the tow-time authorization instead of TEDs was for fisheries that, “out of physical, practical, or economic necessity, require fishermen to limit their tow times naturally.” But information from MDMR indicates that some participants in their skimmer trawl fishery are not aware of the tow time restrictions, and violations of the tow time restrictions have occurred and still occur within the fishery.

Moreover, tow times restrictions are difficult to enforce. Documenting a tow time violation requires enforcement personnel to be in close proximity of a skimmer trawl to monitor gear deployment and recovery, and to record the time when the codend enters the water until it is removed. Also, enforcement personnel need to remain undetected for at least 55 minutes – practically impossible at sea – or else their presence may bias a vessel captain’s operational procedure. There are also concerns repeated captures may result in

turtle mortality in times and areas where sea turtle abundance and skimmer trawl fishing effort is high (Sasso and Epperly 2006).

In the DEIS, we calculated sea turtle catch per unit effort rates based on observed effort in the skimmer trawl fisheries and relative abundances of sea turtle species. These rates were multiplied by overall effort (i.e., 585,576 effort hours in the Northern Gulf of Mexico skimmer trawl fisheries and 6,576 effort hours in the North Carolina skimmer trawl fishery) to determine total sea turtle take in the skimmer trawl fisheries. The analysis resulted in a total anticipated take of 28,127 captured sea turtles in the combined skimmer trawl, pusher-head trawl, and wing net fisheries.

If skimmer trawl vessels regularly exceed the tow time restrictions and kill incidentally captured sea turtles, requiring TEDs instead of tow times may significantly reduce sea turtle mortality by allowing them to escape the net and avoid drowning. In order to extrapolate the sea turtle capture estimates to obtain an associated mortality estimate for the skimmer trawl fisheries operating with installed TEDs, the DEIS analysis considered both the benefits of exclusion through properly installed TEDs and the effect of TED violations on sea turtle capture rates and total mortalities. This analysis was accomplished by calculating overall compliance and non-compliance rates in the Gulf of Mexico and the Atlantic otter trawl shrimp fisheries (to serve as a proxy for the skimmer trawl fisheries, assuming TED compliance would be similar between the two gear types) based on vessel boarding data from TED inspections. Using this data, we estimate that withdrawing the alternative tow time restriction in the preferred alternative would prevent 5,515 sea turtle mortalities in the combined skimmer trawl fisheries. Therefore, we preliminarily determined that the measures proposed here are a necessary and advisable to conserve threatened sea turtle species. We have further preliminarily determined that the measures proposed here are necessary and appropriate to enforce the requirements of the ESA.

We anticipate to make this proposed TED requirement effective by the start of the 2013 shrimping season, not later than March 15, 2013.

Classification

This proposed rule has been determined to be not significant for purposes of Executive Order 12866.

NMFS prepared an Initial Regulatory Flexibility Analysis (IRFA), as required by Section 603 of the Regulatory Flexibility Act, for this proposed rule. The IRFA describes the economic impact this proposed rule, if implemented, would have on small entities. A description of the proposed rule, why it is being considered, the objectives of, and legal basis for this proposed rule are contained at the beginning of this section in the preamble and in the SUMMARY section of the preamble. A copy of the full analysis is available from NMFS (see ADDRESSES). A summary of the IRFA follows.

No duplicative, overlapping, or conflicting Federal rules have been identified.

We expect this proposed rule will directly affect fishermen who use skimmer trawls, pusher-head trawls, and wing nets (butterfly trawls). This gear is only used in Louisiana, Mississippi, Alabama, Florida, and North Carolina. Florida already requires vessels employing this gear to use TEDs. Among the remaining states, approximately 2,435 active vessels have been identified that use this gear (2,248 in Louisiana, 62 in Mississippi, 60 in Alabama, and 65 in North Carolina). We expect this rule, if implemented, will affect all of these vessels.

The Small Business Administration has established size criteria for all major industry sectors in the U.S. including fish harvesters. A business involved in fish harvesting is classified as a small business if it is independently owned and operated, is not dominant in its field of operation (including its affiliates), and has combined annual receipts not in excess of \$4 million (North American Industry Classification System code 114112, shellfish fishing) for all its affiliated operations worldwide.

We estimate the average annual revenue (2008 dollars) for vessels harvesting shrimp using skimmer trawls, pusher-head trawls, or wing nets (butterfly trawls) as approximately \$22,500 for Louisiana vessels, \$21,400 for Alabama vessels, and \$2,700 for North Carolina vessels. However, fishermen, including shrimpers, commonly participate in multiple fisheries, and these results may not include revenue from non-shrimp species. Comparable information for Mississippi vessels is not available because no shrimp landings from Mississippi vessels using this gear were recorded in the comparable time period (2006-2010). Although some Mississippi vessels are expected to be actively using this gear, we do not know whether these vessels are landing their shrimp harvests in other states, selling directly to the public and not through dealers, or engaging in some other practice that has resulted in the absence of recorded landings. Based on the average revenue estimates, all commercial fishing vessels expected to be directly affected by this proposed rule, if implemented, are for the purpose of this analysis considered to be small entities.

If the affected entities are required to pay for their TEDs, we expect this proposed rule will result in an estimated average first-year cost of \$2,120 for fishermen in Louisiana, \$1,000 for fishermen in Mississippi, \$2,061 for fishermen in Alabama, and \$1,133 for fishermen in North Carolina. These results are based on an estimated cost of \$350 per TED, the use of two TEDs per vessel, an annual maintenance cost of \$300 per vessel, and an estimated 4.97 percent reduction in shrimp harvest. Based on the average annual revenue estimates provided above, these first-year costs equal approximately 9.4 percent of average annual shrimp revenue for affected entities in Louisiana, 9.6 percent in Alabama, and 42.4 percent in North Carolina. The total average effect per entity would be reduced if these fishermen also operate in other fisheries, which we expect is the case for most entities. Total revenues from all species for the affected fishermen are not known. However, the estimated average annual net revenue across all Gulf states, including revenue from all species, for operations in the inshore shrimp sector, which

includes the entities described here, is negative, indicating the average vessel is operating at a loss. As a result, any increased costs or reduced revenues are expected to compound these losses. Similar information is not available for North Carolina fishermen, but this analysis assumes the average net revenue for North Carolina fishermen is comparable to that of inshore shrimp fishermen in the Gulf of Mexico.

As previously discussed, a comparable analysis for entities in Mississippi cannot be completed because we lack appropriate revenue information. As a result, the estimated effect for entities in Mississippi simply reflects the cost of the TEDs. The cost associated with TED purchase, however, may be overstated, particularly for Mississippi vessels. The National Fish and Wildlife Foundation (NFWF) allocated funds received from oil recovery income as a result of the DWH oil spill event for Gulf of Mexico restoration efforts. In 2010, funding was made available to purchase and distribute TEDs for skimmer trawl vessels and, to date, an estimated 360 TEDs have been distributed to 180 Mississippi shrimp vessels. Therefore, we believe the majority of skimmer trawl vessels operating in Mississippi already possess TEDs.

Because a TED is a durable device, the cost of a new TED is not an annual expense. The estimated replacement cycle for a TED is at least three years, barring net damage and TED loss. In a year in which a new TED is not purchased, the effect of this rule would be limited to TED maintenance costs and reduced shrimp harvest associated with TED use. These costs then would be approximately \$1,420 for Louisiana vessels, \$1,361 for Alabama vessels, and \$433 for North Carolina vessels. It may also be possible to reduce shrimp losses over time through changes in fishing practices or increased experience with TED use.

The cost of initial TED purchases would be reduced if special funding is available, similar to the NFWF funding in 2010 or a comparable project. This analysis does not assume that TEDs will be provided. If TEDs are provided, the initial and

recurring expected effects of this proposed rule would be reduced to the costs of TED maintenance, replacement TEDs, and shrimp loss.

This proposed rule would not establish any new reporting, record-keeping, or other compliance requirements beyond the requirement to use a TED when using skimmer trawls, pusher-head trawls, and wing nets (butterfly trawls). TEDs are installed by the net dealer, so no special skills would be expected to be required of fishermen for TED installation. Some learning may be required for the maintenance and routine use of the TED. Use of TEDs, however, is common in the general shrimp fisheries and the skills required in their use are consistent with the skill set and capabilities of commercial shrimp fishermen in general. As a result, special professional skills would not be expected to be necessary.

We considered eight alternatives, including the proposed rule and the no-action alternative, to reduce incidental bycatch and mortality of sea turtles in the southeastern U.S. shrimp fisheries. The no-action alternative would not have changed any current management measures and was not selected because it would not result in any reduction in the incidental bycatch and mortality of sea turtles.

Two other management alternatives also considered TED use instead of the current tow time authorization for varying portions of the skimmer trawl fleets. The remaining four alternatives considered different time/area closures for the shrimp fisheries.

The two alternatives that considered alternative tow time restrictions would have, alternatively, required TED use in lieu of tow time restrictions based on vessel length, or limited TED use either to vessels 30 feet and longer, or to those 20 feet and longer. Both alternatives would have affected fewer vessels (1,471 and 2,211 vessels, respectively) and resulted in lower adverse economic effects (by 40 percent and 9 percent, respectively) than the proposed rule. However, we did not select these alternatives because they would not sufficiently reduce the incidental bycatch and mortality of sea

turtles in general, and would also incentivize an effort shift to smaller vessels, thereby reducing the net benefits of TED use by larger vessels.

The four alternatives that considered closures varied by geographic coverage, either the Texas-Louisiana or Louisiana-Mississippi state borders through the Alabama-Florida state border; or by duration, either March 1 through May 31 or April 1 through May 15. The expected economic effects of these alternatives would result from reduced shrimp harvests, and range from aggregate losses of approximately \$50,000 to approximately \$14 million. While three of these alternatives would likely result in lower adverse economic effects for affected entities than the proposed action, none of these alternatives was selected because the low fishing effort during the time periods considered means that the total reduction in the incidental bycatch and mortality of sea turtles would be insufficient to afford these species the necessary protection.

The Endangered Species Act provides the statutory basis for the rule.

Locations and Times of Public Hearings

Public hearings will be held at the following locations:

1. Morehead City -- Crystal Coast Civic Center, 3505 Arendell Street, Morehead City, NC 28557.
2. Larose -- Larose Regional Park and Civic Center, 307 East 5th Street, Larose, LA 70373.
3. Belle Chasse -- Belle Chasse Community Center, 8398 Highway 23, Belle Chasse, LA 70037.
4. D'Iberville -- L.H. "Red" Barnett Senior Center, 10450 Lamey Bridge Road, D'Iberville, MS 39540.
5. Bayou La Batre -- Bayou La Batre Community Center, 12745 Padgett Switch Road, Bayou La Batre, AL 36509.

The public hearing dates are:

1. May 30, 2012, 2 p.m. to 4 p.m., Morehead City, NC.
2. June 4, 2012, 4 p.m. to 6 p.m., Larose, LA.
3. June 5, 2012, 4 p.m. to 6 p.m., Belle Chasse, LA.
4. June 6, 2012, 4 p.m. to 6 p.m., Biloxi, MS.
5. June 13, 2012, 2 p.m. to 4 p.m., Bayou La Batre, AL.

References

NMFS. 2002. Endangered Species Act Section 7 Consultation on Shrimp Trawling in the Southeastern United States, under the Sea Turtle Conservation Regulations and as Managed by the Fishery Management Plans for Shrimp in the South Atlantic and Gulf of Mexico. December 2, 2002.

Price, A.B. and J.L. Gearhart. 2011. Evaluations of turtle excluder device (TED) performance in the U.S. southeast Atlantic and Gulf of Mexico skimmer trawl fisheries. NOAA Technical Memorandum NMFS-SEFSC-615, 15 pp.

Sasso, C.R. and S.P. Epperly. 2006. Seasonal sea turtle mortality risk from forced submergence in bottom trawls. Fisheries Research 81:86-88.

List of Subjects in 50 CFR Part 223

Endangered and threatened species; Exports; Imports; Transportation.

Dated: May 3, 2012

Paul N. Doremus
Deputy Assistant Administrator for Operations
National Marine Fisheries Service

For the reasons set out in the preamble, 50 CFR part 223 is proposed to be amended as follows:

PART 223--THREATENED MARINE AND ANADROMOUS SPECIES.

1. The authority citation for part 223 continues to read as follows:

Authority: 16 U.S.C. 1531-1543; subpart B, § 223.201-202 also issued under 16 U.S.C. 1361 et seq.; 16 U.S.C. 5503(d) for § 223.206(d)(9).

§ 223.206 [Amended]

2. In § 223.206, paragraph (d)(2)(ii)(A)(3) is removed and reserved.

[FR Doc. 2012-11201 Filed 05/08/2012 at 11:15 am; Publication Date:
05/10/2012]